

The Workplace Reimagined

Information Technology Division
FY21 Year in Review

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Mission

The Information Technology Division provides solutions that upgrade our technical infrastructure, promote progressive implementations, and expand our innovative path to benefit all City of Memphis employees and citizens.

Vision

Information Technology is committed to providing technology-based solutions that enable the City government to connect with and better serve the constituents of the City of Memphis in ways that improve the quality of every experience.

Core Values

1. To operate with integrity
2. To provide quality customer service
3. To be professional, proactive, and competent
4. To build positive relationships
5. To communicate effectively
6. To find areas for professional development

Focus

INFRASTRUCTURE

To ensure our basic technology needs and systems are in place to operate efficiently

IMPLEMENTATION

To ensure we are implementing smart enterprise solutions

INNOVATION

To ensure we are on the cutting edge of technology advancements

Our Executive Team



From left to right: Allie Harrison, IT Implementation Manager; Augustine Boateng, IT Security Manager; Kimberly Bailey, Chief Information Officer; Wendy Harris, Deputy Chief Information Officer; Von George, Office Administrator; Timothy Anderson, IT Finance Manager

Our Management Team

Steve Crosthwait

Senior IT Operations Manager

Chrys McDonald

Service Delivery Manager

Lori Franklin

PMO Manager

Binish Gopal

Enterprise Applications Manager



Enterprise Applications



Maintains and supports over 120 Applications including Oracle EBS and Fusion, Microsoft Applications, GIS. Provides website design, implementation, and content management for the City’s internet and intranet websites.

Finance/Procurement



Manages City’s contracts with third party organizations and supports City divisions’ information technology funding needs by providing capital budget planning and procurement assistance.

Data Center

Manages a world-class network operation data center that houses the City’s mission critical applications, communications, and e-government initiatives.



Security

Oversees firewall security, intrusion detection, VPN for remote access, protection against viruses and spam, and encryption for web systems.



Communications & Training



Manages IT communications. Develops technical training materials, QRGs, presentations, pamphlets and work materials. Conducts training sessions for City Divisions.

Network/Telecom



Manages City network needs and services to include, network hardware and software, telephone lines, telephone systems, and contact centers.

Project Management



Responsible for planning and overseeing projects to ensure they are completed on time and within the scope and budget. Ensures IT programs meet division goals and requirements.

Service Delivery



Troubleshoots computer, printer and communications problems. Assembles, installs, configures, modifies, moves and/or relocates hardware/software per end user requirements. Manages the Technology Service Desk to oversee requests for computer, telecom, applications, and other related technology issues from end users. Manages the flow of hardware/software goods from manufacturers and maintains inventory records.

Top 20 projects in 2020!

Fire Station Cameras
Installed Verkada cameras for added security

Provenue
The Pink Palace Family of Museums moved from an all paper/phone ticket purchasing process to an electronic procuring and scanning system

DocuSign Implementation
Upgraded from manual to an electronic signature process

Public Camera Implementation
Replaced and added cameras throughout the City of Memphis Public facilities

ITD Procurement Retention Policy Project
Implemented procurement 10 year file storage and automation process

Memphis Animal Shelter Migration
Migrated the MAS Application Chameleon to ShelterLuv cloud based product

Mitel Phone Upgrades
Upgraded multiple phones to one universal system

Building Access
Replaced the existing end-of-life building access system which controls employee, contractor and vendor building access

AI Pothole Blight Detection Phase II
Deployed smart city solutions on Google Cloud, specifically for pothole detection and blight detection

ITD Contract Employees in Oracle
Integrated contract worker information into Oracle Cloud using conversion scripts

Data Center Backup Transition
Implemented Veeam software and Isilon hardware

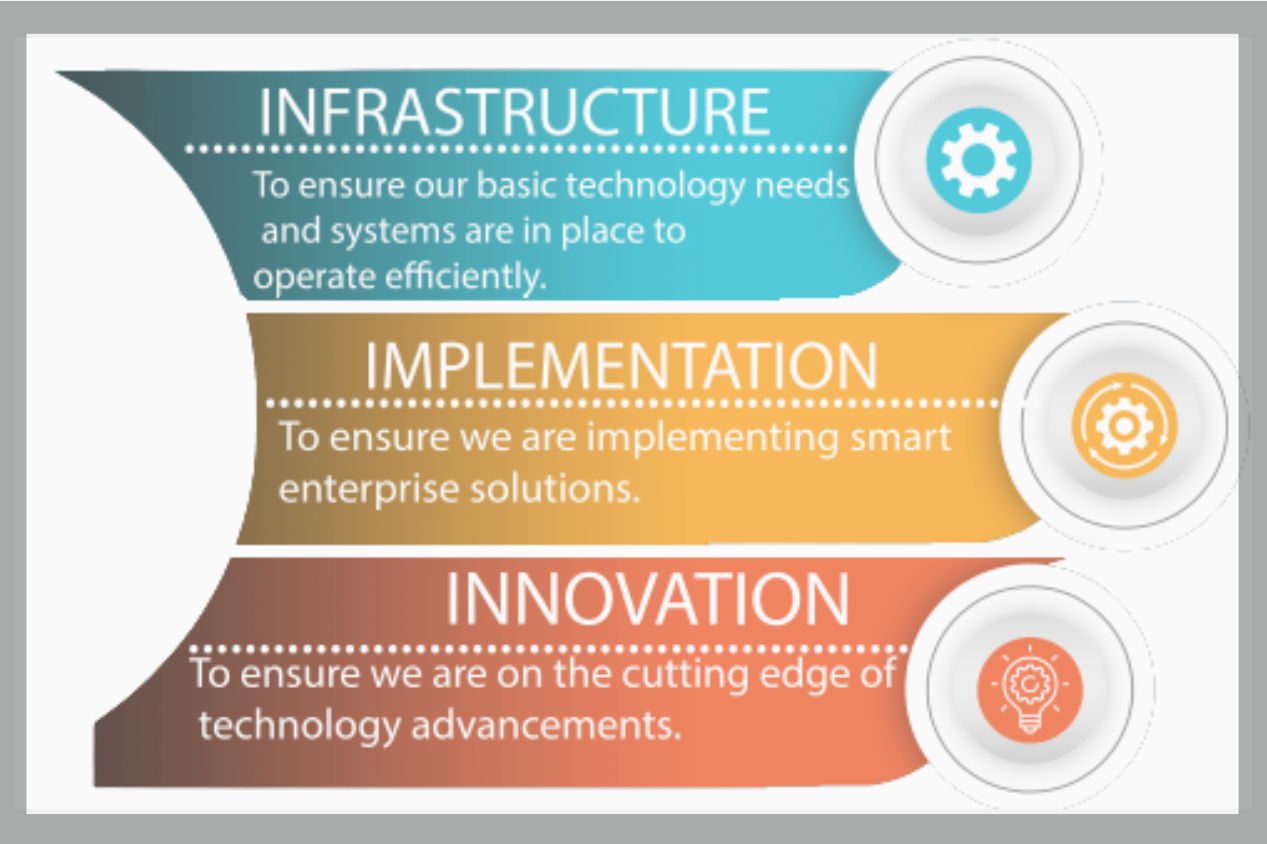
Suite 250 Renovation
Redesigned the Service Delivery area to allow for social distancing and creating a more efficient work environment

Data Center Relocation
Relocated the data center from City Hall to Benjamin Hooks library

Okta Single Sign-On
Implemented a framework to ensure the enterprise end users have appropriate access to technology resources & are authenticated appropriately

Capacity & Redundancy Workshop
IT managers and leads collaborated to develop a road map for CoM applications improvements

Re-imagine Policing Website
Launched reimagine.memphistn.gov in response to protests against police



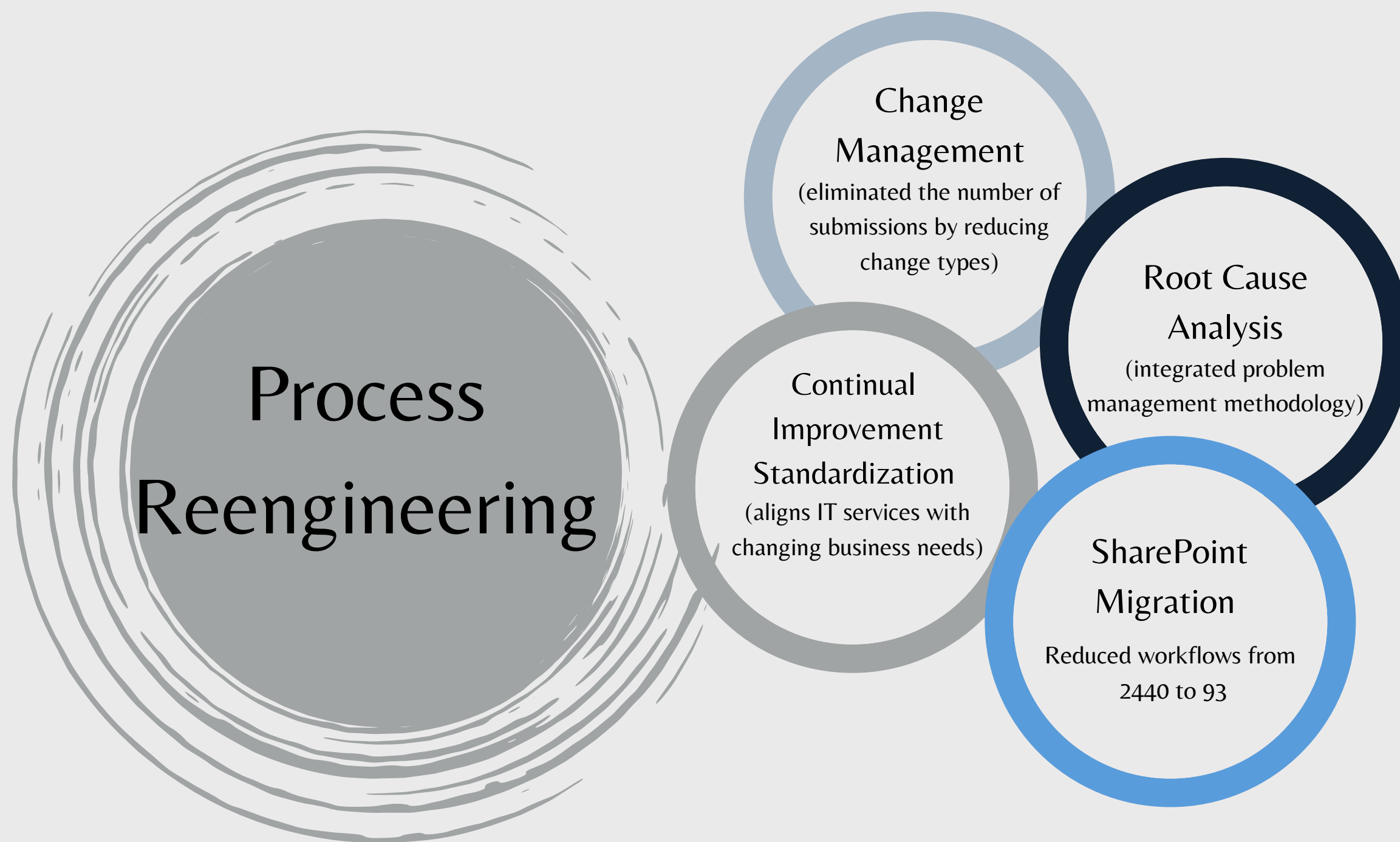
Manage Engine Applications Monitoring
Implemented monitoring system for critical system notification alerts

576 to 636 Migration
Migrated number prefix for continuity and system management

HCD Weatherization
Implemented a website/webform where citizens can apply for grants related to house repairs for HCD to include automated workflows & reports generation

MPD Security Assessment
Implemented Quarterly Assessment of City of Memphis most critical areas to identify and reduce risk

We are committed to improving the quality of the customer's life, delivering high value to the customer, and stripping away non-value added activity.



Our Commitment

Our Leaders

- Educate our team members on how to recognize waste
- Remain humble
- Solicit and welcome ideas from everyone
- Recognize every contribution as valuable
- Lead with world class principles that are thoughtfully applied
- Invest in our team members and their work environment

Our Team Members

- Keep an open mind
- Remain humble
- Refrain from overcomplication
- Take responsibility
- Think outside the box
- Collaborate
- Accept change

IT Network

Infrastructure Awareness

Network Architecture Assessment by Ernst & Young

The City of Memphis engaged EY to conduct a Network Architect assessment between November 16, 2020 and February 9, 2021 to provide advisory services relating to the City of Memphis current network infrastructure. EY incorporated Security zoning, WAN transport, Internet/extranet edge gateway, routing and traffic engineering, service management including service provisioning, orchestration and metrics across the enterprise infrastructure and collaborated on the development of a future-state enterprise network architecture and associated deployment roadmap.

Objectives- The objectives of the assessment were to analyze the current state and recommend future-state enterprise network architecture to allow the City of Memphis to:

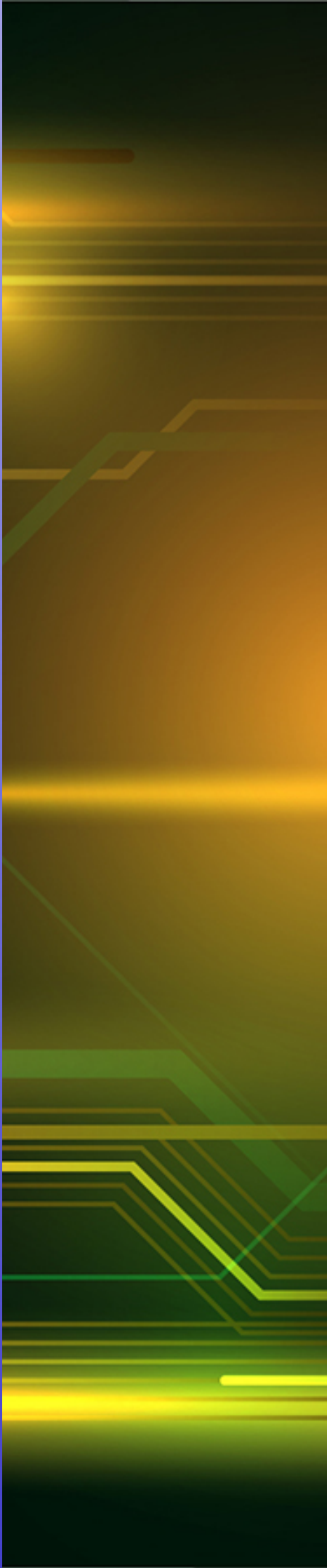
- Rationalize and align transport technologies and interconnectivity models
- Deliver secure and scalable routing elements and network functionality between locations across the City of Memphis network architecture that require reliable delivery of applications and services
- Deliver a secure and scalable network infrastructure to meet the business and technical requirements

Deliverables- EY prepared a written report covering the assessment results. The Report included an executive summary, findings, and recommendations, including:

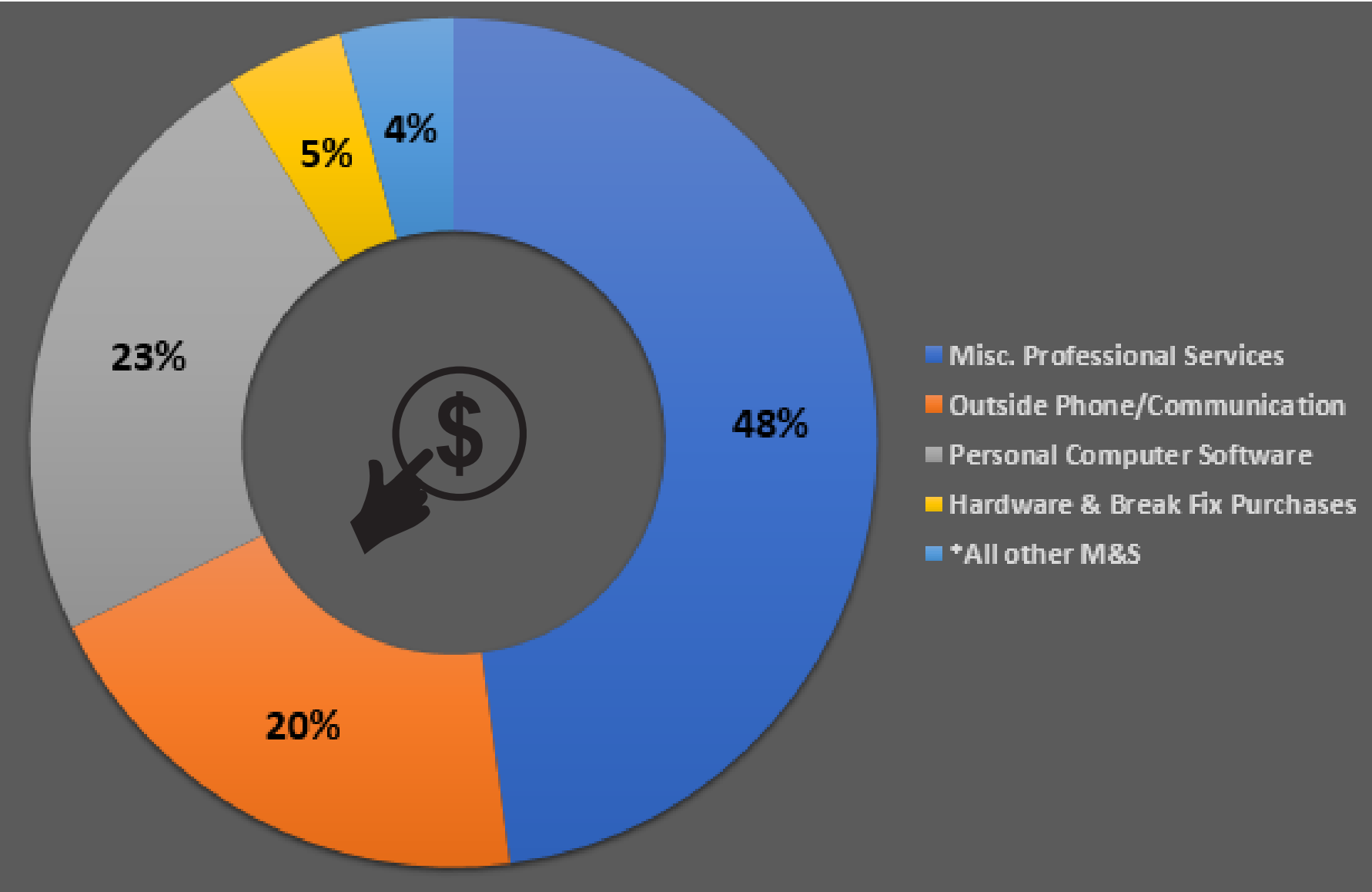
- “As-Is” report of the current-state network architecture, and incident management process
- Gap analysis
- Summary of initial observations report for the network architecture topics addressing:
 - WAN/MAN topology, connectivity model and transport technologies
 - Routing and traffic engineering
 - Service differentiation for mission critical services (e.g. business applications, voice, video)
- Future-state strategy and security zoning, Internet/extranet gateway reference architecture based on leading practices and suitable for the City of Memphis business and technical objectives
- Actionable roadmap to support deployment planning

Conclusion- In achieving the future-state security zoning, WAN and Internet/extranet gateway architectures, the City of Memphis will enable the following benefits at an organizational level:

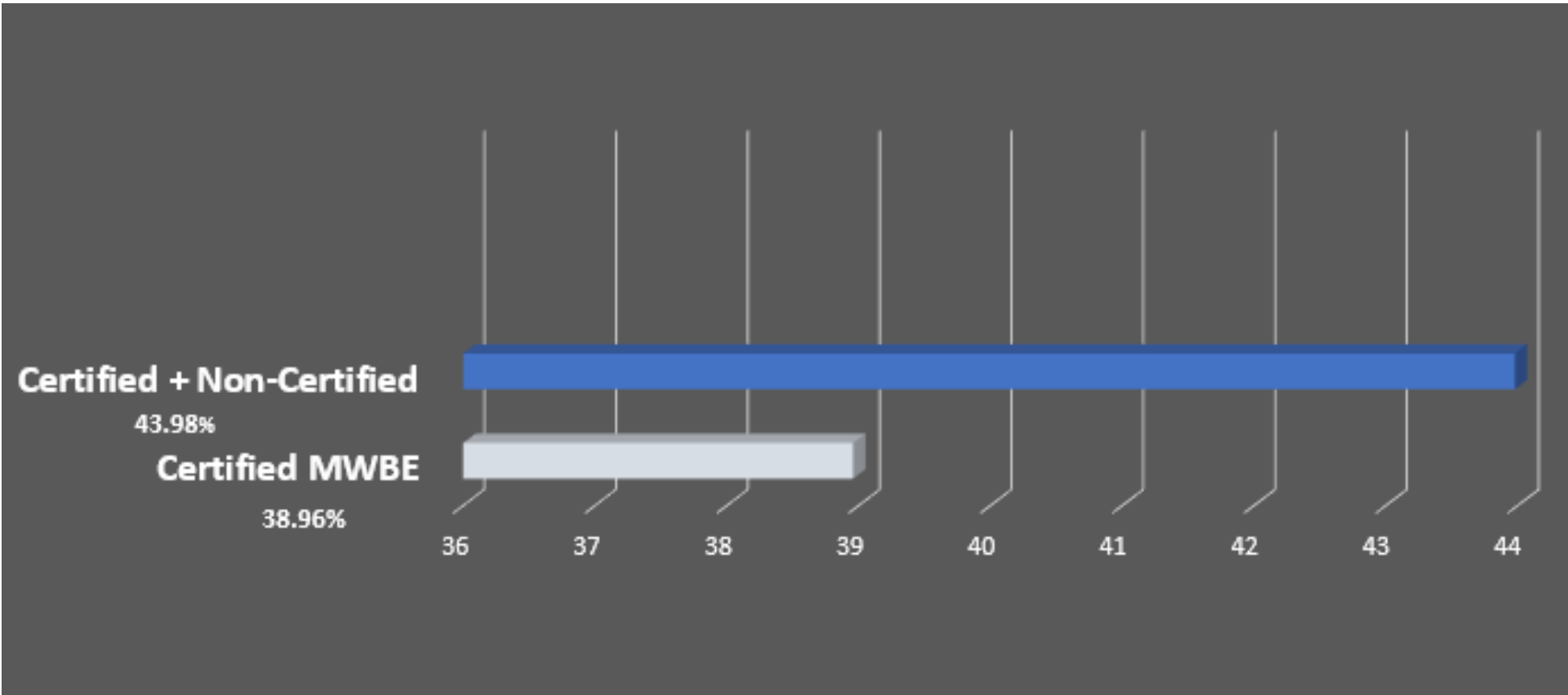
- Connectivity to and alignment with the data center and managed/cloud service consumption strategies
- Improved network resiliency, performance, security, scalability and agility
- Quick wins are in progress as recommended



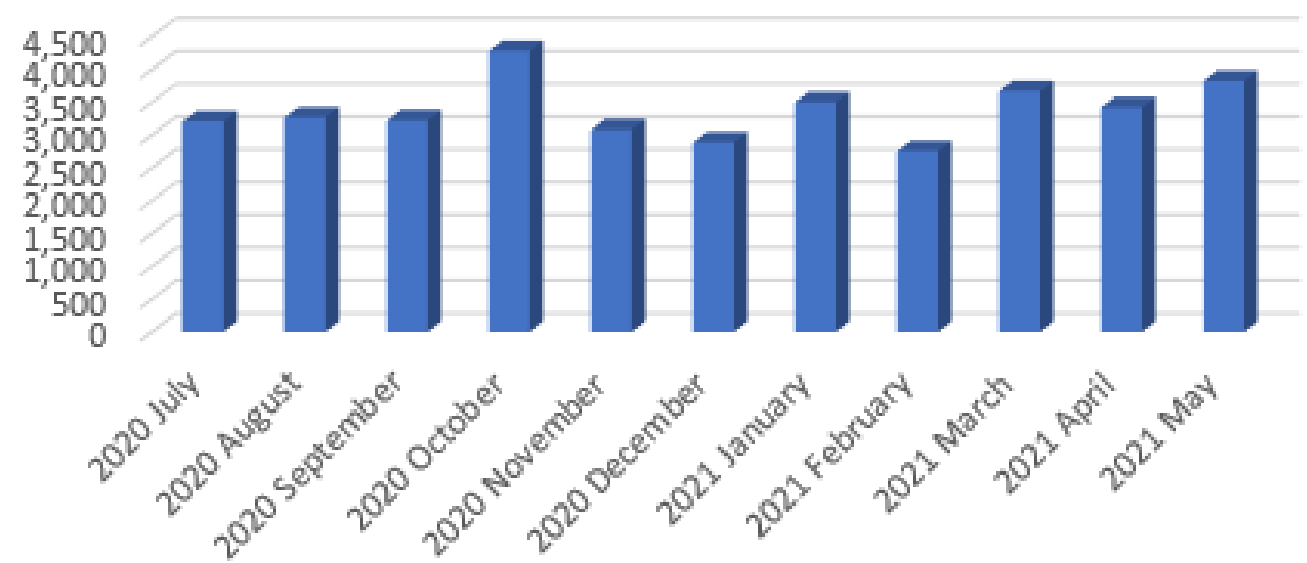
FY21 Major M&S Expenditures



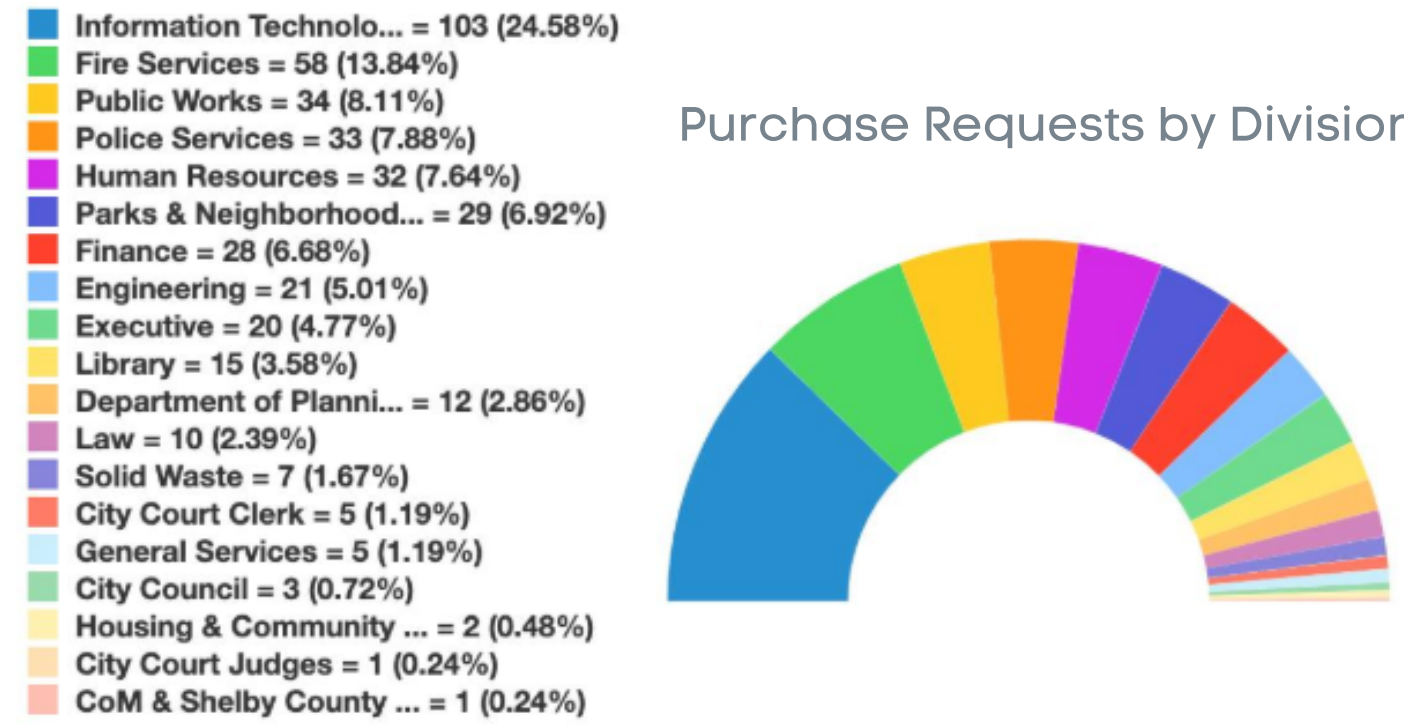
MWBE Spend
as of December 31, 2020



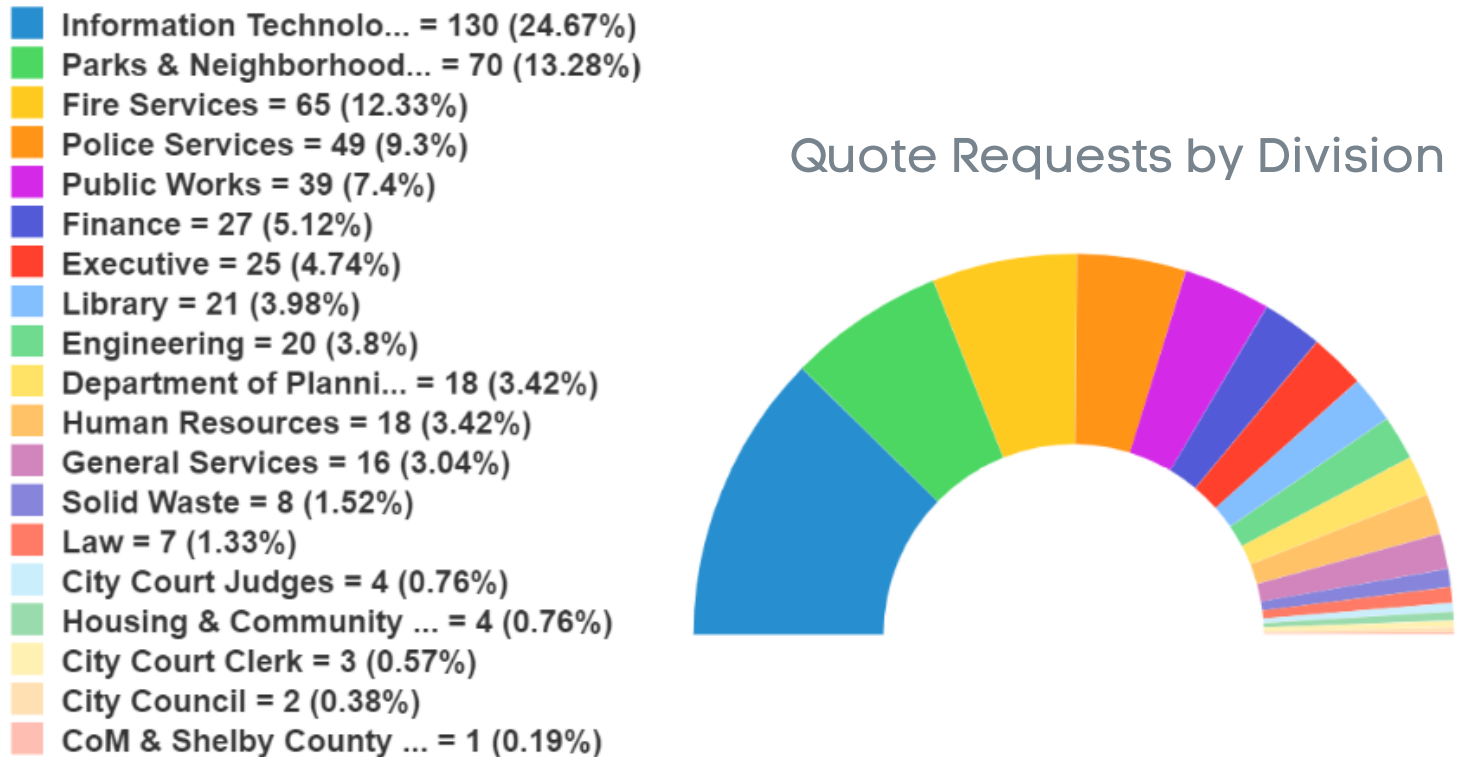
Technology Service Center
Monthly Call Volume



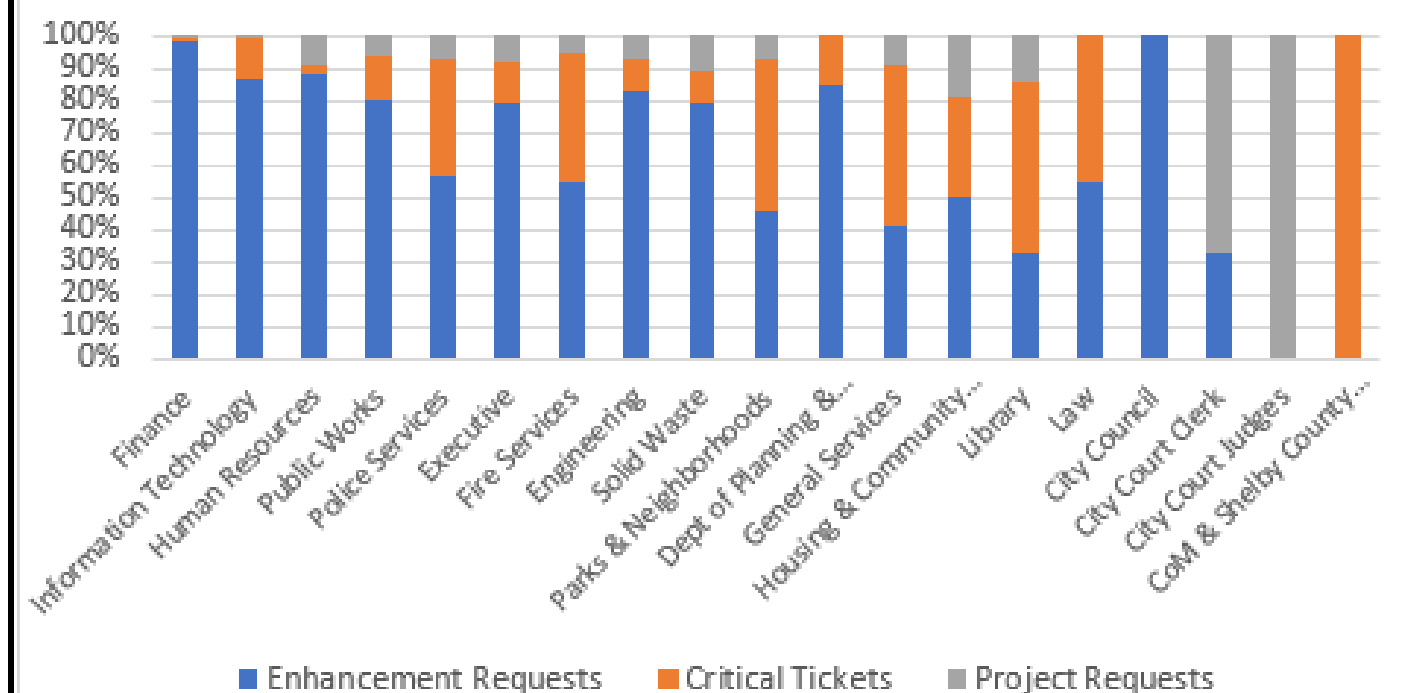
Purchase Requests by Division



Quote Requests by Division



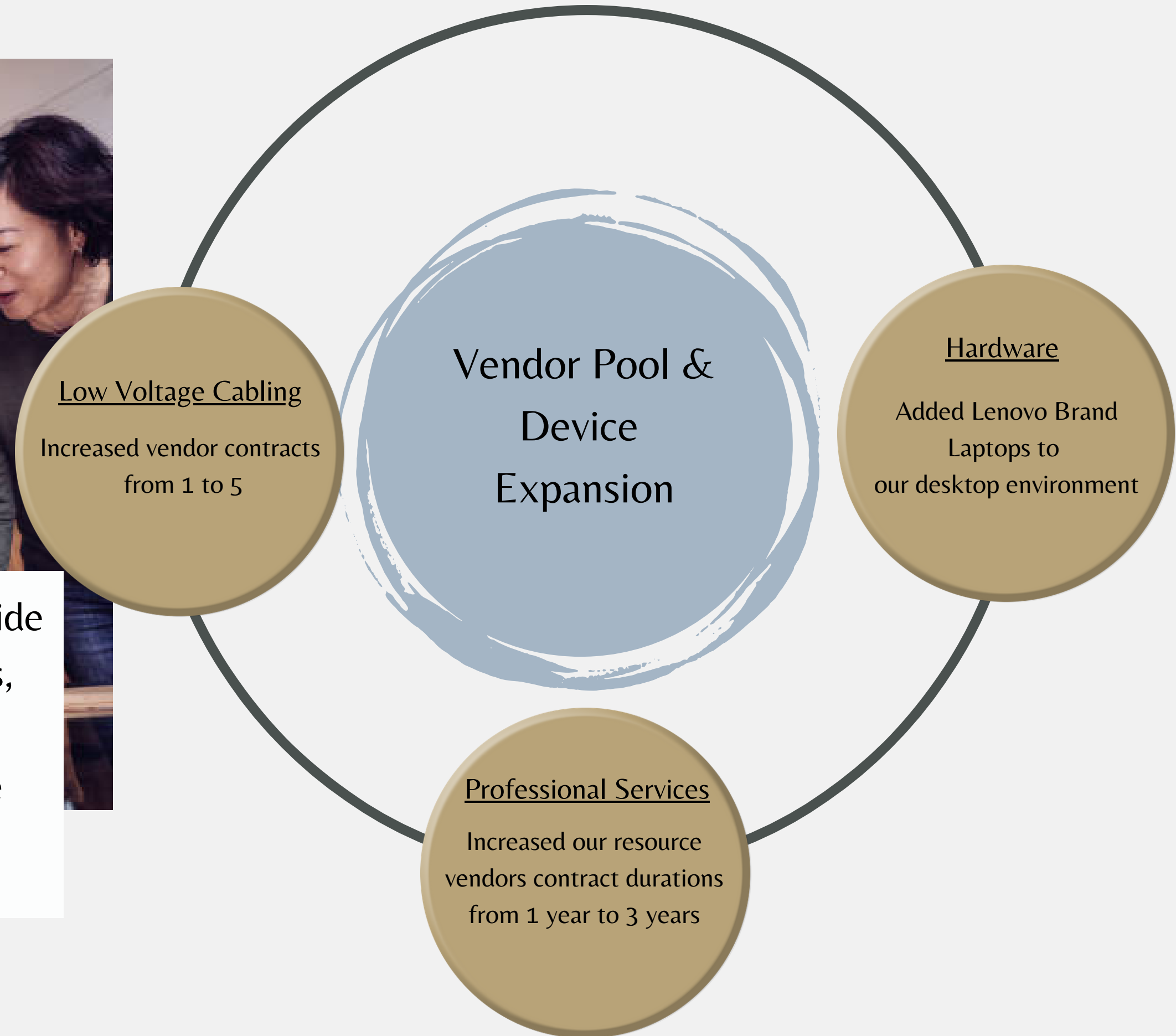
Criticals/Enhancements/Projects



Vendor Pool & Device Expansion



We support the City of Memphis in its efforts to provide the most cost-effective method of procuring materials, products and services while encouraging the participation of minority and women businesses in the purchasing process.





We understand the importance of challenging the status quo to satisfy changing customer needs. This methodology deemed beneficial when the City of Memphis had to reduce staff occupancy due to the COVID-19 epidemic. The value that digital transformation creates – as outlined in ITIL 4 (Information Technology Infrastructure Library) – is possible only when there's collaborative working and communication between different IT disciplines and stakeholders to ensure the transformation is effective. We integrated digital technology into all areas of our business, fundamentally changing how we operate and deliver value to our customers.

Engage our Customers

Empower Our Employees

Optimize Our Operations

Transform Our Products

- Digital News App
- Microsoft Teams Tuesdays
- Virtual Grand Openings
- Did You Know Mondays

- Virtual Quarterly IT Meetings
- Smartsheet Collaborate Workspace
- YourVoiceMatters Email
- Elevating IT/Employee of the Qtr. Awards

- Touchless Sign In
- Project Document Automation
- Electronic SOP Acknowledgement
- Automated Ticket Routing

- Okta Single Sign-On
- DocuSign Electronic Signature
- Microsoft OneDrive File Storage
- Mitel Soft Phones

The Information Technology Division is committed to its support of career education and regularly participates in community learning events. This year we participated in the CCTE 2021 Virtual Informational Technology Day, Tech901 Mock Interviews, Cultivate Program Discussion, and our CIO delivered the Keynote address for the Tech901 Fall Commencement.

The IT Management team conducted mock interviews for the Class of 2020 Tech901 students. This exercise offered real-life interview experience to help aid them on their journey to a career in IT.

CULTIVATE is an immersion program designed to provide opportunities for HR students to connect with world-class HR leaders (mentors) and a network of global peers. The themes are: People Science & Analytics; Design Thinking & Agility; Landing an HR Career; Work & HR Technology and Branding. Typically 20 students from around the globe participate.

The 2021 CCTE Virtual Information Technology (IT) Day was held on Thursday, February 11, 2021 from 9:00 AM – 10:00 AM. This online virtual event was presented through a partnership between the Division of College, Career and Technical Education, the Greater Memphis Chamber of Commerce, and TechEd2Go.



A Painted Dream

On December 17th CIO, Kimberly Bailey delivered the Keynote Address during Tech901 Virtual Fall Commencement to a graduating class of 272.

"We're waiting on you to bring...
your talent, your creativity,
your fresh eyes to old
problems, your expertise,
your full self."

KIMBERLY BAILEY

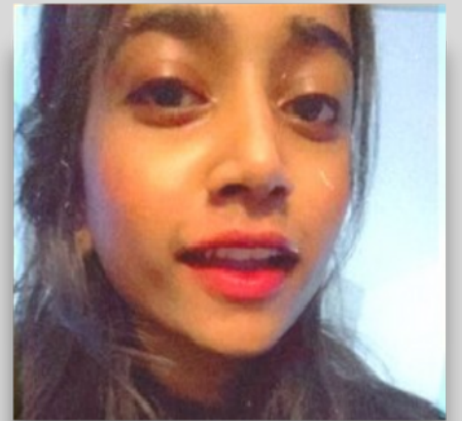


Will Melton worked with the Service Delivery department on the OER / Windows 10 Upgrade project. Will imaged computer devices, performed physical inventory audits, and updated project data on Excel spreadsheets.



Meghana Kamani recently joined enterprise applications team as a Junior Developer. She is working on data analysis and reporting. She will help us develop some reports and dashboards in the purchasing and procurement area.

Kalyani Pulgari learned how to use GIS software, and built some web maps and apps during her time with the ITD. She also learned technical documentation skills and helped create and consolidate technical documentation for the ITD.



The Memphis Urban Fellows Program (MUFP) is a highly selective, year-round initiative that offers college students the opportunity to intern with various divisions of the City of Memphis Government. Their mission is to develop the change agents of tomorrow, future City of Memphis leaders, and enhance the interaction of area college students with City government, all in support of retaining the best and brightest talent for Memphis. We hosted five Urban Fellows this year.



Joshua White helped the ITD organize project documentation in SharePoint. He was able to pick up some reporting and dashboarding skills as well.



Angelo Donati developed web maps, generated design documentation, and developed reporting dashboards. Angelo got a chance to design, document, and create web maps and applications using GIS software. He was able to expand his experience and know how on data technologies, web design, and programming languages during his tenure with the ITD.

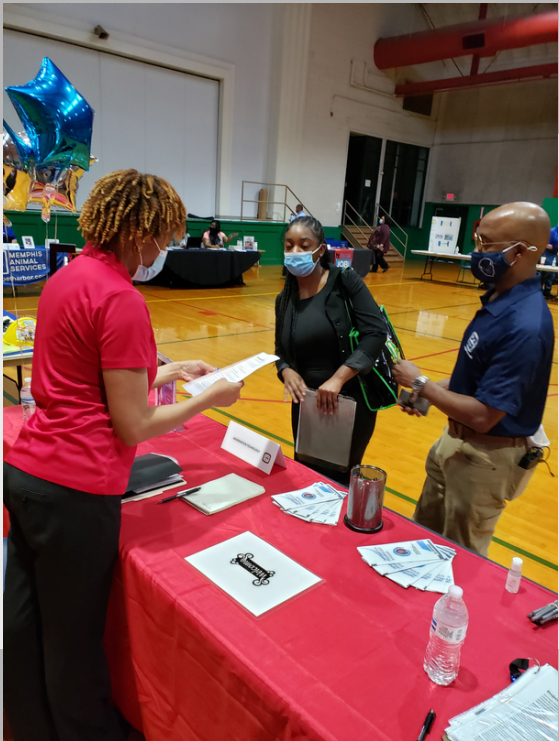
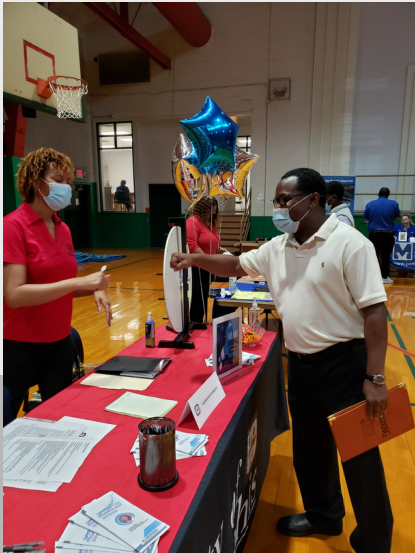
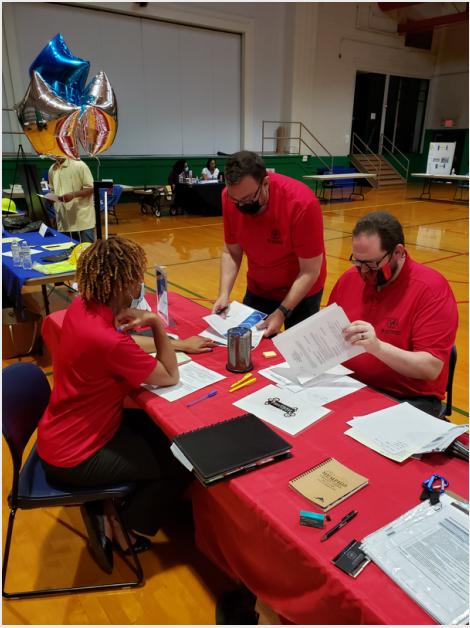


Marina McCormick was responsible for updating the ITD SOP's to a new modern template. There were quite a few templates that needed consistency when end users reviewed ITD SOP's. Some of the SOPs she worked on had not been updated sin over a decade.



Shaping the
Future of IT

On June 12th, the ITD participated in a job fair at Gaston Community Center hosted by Councilman JB Smiley Jr. and Councilman Martavious Jones. This collaborative event allowed the ITD to conduct in-person interviews and hire Amanda Glover and Duiet Wright.



We have established a continuous mindset of always elevating IT. This year we received the Digit Cities 2020 Survey award for populations of 500,000 or more for modernizing infrastructure, cybersecurity, and citizen services.



Memphis, like many U.S. cities, found that technology was one of its greatest allies earlier this year when crisis struck. The city was quick to implement a telecommuting policy in response to the start of the COVID-19 pandemic in March. Five hundred laptops were procured for staff to take home, and the city quickly set up virtual meeting platforms like Microsoft Teams. The IT Division also created a matrix IT environment so that those who needed to work from the office could continue to do so safely.

Memphis developed its first-ever IT Strategic Plan in August 2020. It encompasses a great number of goals which include completing 56 improvements by 2024 that will benefit both employees and citizens.

The plan established an open data website for the city with a guide to help citizens navigate it, the Memphis Data Hub, created by the Data Governance Committee and the new office of Performance Management. It encompasses a wide range of data including 311, performance metrics, and a Data Catalog.

Infrastructure saw some improvements in Memphis recently. The city upgraded the network infrastructure at all its community centers and every branch of the library, and is currently in the process of upgrading the network infrastructure in the data center. In November 2019, the city finished implementation of free Wi-Fi for public use at all library branches. Additionally, Memphis has entered into an ongoing partnership with Google to detect potholes and blight around the city using artificial intelligence.

Technology.

As the City of Memphis' first female African American CIO, Kimberly Bailey was spotlighted in Technology Magazine's March 2021 feature, "The City, The CIO, COVID-19 and Collaboration".

The City

The City of Memphis reeled under the impact of the pandemic.

The CIO

Kimberly Bailey is Director of Information Technology and Chief Information Officer for the City of Memphis. She is the first African American female to hold the position. Bailey is an experienced leader with demonstrated skills in project management, team building, public speaking, and team facilitation. She enjoys finding new and innovative ways to address complex issues and obtain excellent outcomes.

Collaboration

"We had a PBX system that was over 20 years old, and only one person in our organization really knew how to support it. We were looking for a solution that could better meet our needs. That's why we chose Mitel." Leveraging the MiVoice Business platform, Mitel designed a solution with an integrated contact center that lets employees and the wider community connect more easily via the device and channel of their choice. Working together with its partner CRI, Mitel enabled the City to get the new contact center up and running in time to respond to higher call volumes associated with COVID-19 related inquiries.

Covid-19

By March 2020 the IT Division found itself having to respond to unprecedented circumstances. "We immediately decided to send home our non-customer facing people like programmers and developers and project managers. They could work from home easily and we needed more space for the people who did have to come into the office so they needn't work in proximity.

"I want to know what each person does, what they like about their work and what they would suggest to make it better."

-CIO Kimberly Bailey
On relationship building with her team.

Call Us

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<https://www.memphistn.gov/government/information-technology/>

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The Information Technology Division proudly supports the residents and employees of the City of Memphis.